

09/401,874

(FILE 'HOME' ENTERED AT 12:52:38 ON 22 NOV 2000)

FILE 'USPATFULL' ENTERED AT 12:53:12 ON 22 NOV 2000

L1 18542 S IDENTIF? (P) FAIL?

L2 861353 S (TABLE# OR LIST? OR MATRI?)

L3 8631 S SEND? (P) PACKET#

L4 372 S NEIGHBOR (P) ACTIVE#

L5 2588 S L1 (P) L2

L6 35 S L5 (P) L3

L7 0 S L6 (P) L4

L8 0 S L6 AND L4

L9 3 S L6 (P) ACTIVE

L10 627 S IDENTIF? (4A) FAIL? (3A) (DEVICE# OR UNIT# OR SYSTEM# OR

NETWOR

L11 1859 S IDENTIF? (4A) (FAIL? OR ERROR# OR TROUBLE OR PROBLEM#)

(3A) (DE

L12 267 S NEIGHBOR (2A) L2

L13 0 S L11 (P) L12

L14 1 S L11 AND L12

L15 1 S L14 AND PACKET#

L16 685646 S (ROUTER# OR SWITCH? OR BRIDGE#)

L17 1 S L15 AND L16

L18 1 S L17 AND ACTIVE

L19 1193 S PERIOD? POLL?

L20 9450 S UPDAT? (3A) (TABLE# OR LIST? OR MATRI?)

L21 0 S L18 AND L19

L22 0 S L18 AND L20

L23 14404 S INDEX? (3A) (TABLE# OR LIST? OR MATRI?)

L24 2566 S NETWORK ADDRESS?

L25 50 S MANAGEMENT INFORMATION BASE II OR MIB II

L26 0 S L18 AND L23

L27 0 S L18 AND L24

L28 0 S L18 AND L25

L29 192695 S (PLURAL? OR MULTIPL?) (2A) (DEVICE# OR UNIT# OR SYSTEM#)

L30 655 S L29 AND L11 AND L2

L31 517 S L30 AND L16

L32 21 S L31 AND L19

L33 7 S L32 AND L20

L34 3 S L33 AND L23

L35 3 S L34 AND L24

L36 0 S L25 AND L35

L37 185 S L11 AND L20

L38 12 S L37 AND L23 AND L24

L39 0 S L38 AND L25

L40 12 S L16 AND L38

L41 3 S L19 AND L40

L42 16 S L33 OR L40

L43 13 S L42 NOT L41

L44 0 S US5157667/UREF

L45 0 S US5157667/USREF

L46 0 S US5157667/USRREF

L47 59701 S TI

L48 37 S US5157667/RPN

L49 0 S L48 AND LL19

L50 2 S L48 AND L19

L51 0 S L20 AND L50

L52 246 S L23 AND L24

L53 0 S L52 AND L48

L54 0 S L48 AND L25  
L55 0 S L25 AND L11  
L56 2 S L11 AND L25  
L57 23 S L11 (P) L52  
L58 23 S L11 AND L23 AND L24  
L59 2 S L58 AND NEIGHBOR  
L60 0 S L58 AND L48  
L61 182 S L37 NOT L34  
L62 20 S L57 NOT L34  
L63 1443 S TABLE INDEX?  
L64 9 S L63 AND L62

=> d 1-9

L64 ANSWER 1 OF 9 USPATFULL  
AN 2000:119091 USPATFULL  
TI Networked facilities management system  
IN Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States  
Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States  
Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
PA Johnson Controls Technology Company, Plymouth, MI, United States (U.S.  
corporation)  
PI US 6115713 20000905  
AI US 1996-706194 19960830 (8)  
RLI Division of Ser. No. US 1993-170086, filed on 17 Dec 1993, now  
patented,  
Pat. No. US 5884072 which is a division of Ser. No. US 1990-476031,  
filed on 30 Jan 1990, now abandoned  
DT Utility  
LN.CNT 5994  
INCL INCLM: 707/010.000  
INCLS: 709/201.000; 709/238.000; 714/001.000; 714/037.000  
NCL NCLM: 707/010.000  
NCLS: 709/201.000; 709/238.000; 714/001.000; 714/037.000  
IC [7]  
ICM: G06F011-00  
EXF 707/10; 709/200-203; 714/1; 714/2; 714/37

L64 ANSWER 2 OF 9 USPATFULL  
AN 1999:34963 USPATFULL  
TI Networked facilities management system with updated data based on aging  
time  
IN Rasmussen, David E., Wales, WI, United States  
PA Johnson Service Company, Milwaukee, WI, United States (U.S.  
corporation)  
PI US 5884072 19990316  
AI US 1993-170086 19931217 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now  
abandoned

DT Utility  
LN.CNT 5951  
INCL INCLM: 395/600.000  
INCLS: 395/200.010; 395/200.050; 395/200.160; 364/131.000; 364/132.000;  
364/221.900; 364/242.960; 364/550.000; 364/DIG.001; 364/DIG.002  
NCL NCLM: 709/223.000  
NCLS: 700/002.000; 700/003.000; 709/224.000  
IC [6]  
ICM: G06F017-30  
ICS: G06F015-163  
EXF 395/200; 395/600; 395/700; 395/200.01; 395/200.05; 395/200.16; 364/569;  
364/131; 364/132; 364/221.9; 364/242.96; 364/550

L64 ANSWER 3 OF 9 USPATFULL  
AN 97:8661 USPATFULL  
TI Networked facilities management system having a node configured with  
distributed load management software to manipulate loads controlled by  
other nodes  
IN Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States  
Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States  
Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
PA Johnson Service Company, Milwaukee, WI, United States (U.S.  
corporation)  
PI US 5598566 19970128  
AI US 1994-179494 19940107 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now  
abandoned  
DT Utility  
LN.CNT 5976  
INCL INCLM: 395/750.000  
INCLS: 364/DIG.001; 364/DIG.002; 364/221.900; 364/222.000; 364/228.000;  
364/229.000; 364/229.100; 364/230.000; 364/230.400; 364/242.940;  
364/273.000; 364/273.100; 364/273.200; 364/273.300; 364/273.400  
NCL NCLM: 713/324.000  
NCLS: 713/300.000  
IC [6]  
ICM: G06F015-177  
EXF 364/DIG.1MSFile; 364/DIG.2MSFile; 364/492; 364/493; 395/200; 395/375;  
395/600; 395/750; 395/800; 395/200.01; 395/200.02; 395/200.03;  
395/200.05; 395/200.1; 395/200.11

L64 ANSWER 4 OF 9 USPATFULL  
AN 96:78621 USPATFULL  
TI Networked facilities management system with optical coupling of local  
network devices  
IN Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States

Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States  
Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
PA Johnson Service Company, Milwaukee, WI, United States (U.S. corporation)  
PI US 5550980 19960827  
AI US 1994-178970 19940107 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now abandoned  
DT Utility  
LN.CNT 5932  
INCL INCLM: 395/200.050  
INCLS: 364/DIG.001; 364/DIG.002; 364/228.000; 364/228.400; 364/230.000;  
364/230.400; 364/238.200; 364/238.300; 364/240.000; 364/240.600  
NCL NCLM: 359/111.000  
NCLS: 709/223.000  
IC [6]  
ICM: G06F003-00  
EXF 364/DIG.1MSFile; 364/DIG.2MSFile; 395/200; 395/250; 395/375; 395/500;  
395/750; 395/800; 395/200.01; 395/200.02; 395/200.05; 323/902;  
340/854.3; 340/854.7; 340/854.8; 340/854.9; 372/43; 372/50; 372/703  
L64 ANSWER 5 OF 9 USPATFULL  
AN 96:46894 USPATFULL  
TI Networked facilities management system  
IN Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States  
Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States  
Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
PA Johnson Service Company, United States (U.S. corporation)  
PI US 5522044 19960528  
AI US 1994-185181 19940121 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now abandoned  
DT Utility  
LN.CNT 5966  
INCL INCLM: 395/200.060  
INCLS: 364/DIG.001; 364/DIG.002; 364/221.000; 364/221.900; 364/222.000;  
364/222.100; 364/228.000; 364/229.000; 364/240.000; 364/242.940;  
364/242.950; 364/920.300; 364/921.000; 364/921.400; 364/940.000;  
364/940.610; 395/260.100

NCL NCLM: 709/222.000  
NCLS: 709/229.000; 709/243.000  
IC [6]  
ICM: G06F013-00  
EXF 364/DIG.1MSFile; 364/DIG.2MSFile; 370/60; 370/94; 370/99; 370/110.1;  
370/94.1; 370/85.1; 370/85.7; 370/95.1; 370/60.1; 395/200; 395/250;  
395/275; 395/650; 395/800

L64 ANSWER 6 OF 9 USPATFULL  
AN 96:34962 USPATFULL  
TI Networked facilities management system with time stamp comparison for  
data base updates  
IN Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States  
Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States  
Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
PA Johnson Service Company, Milwaukee, WI, United States (U.S.  
corporation)  
PI US 5511188 19960423  
AI US 1993-176730 19931230 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now  
abandoned  
DT Utility  
LN.CNT 5929  
INCL INCLM: 395/600.000  
INCLS: 364/282.100; 364/DIG.001; 364/DIG.002  
NCL NCLM: 707/203.000  
NCLS: 707/104.000  
IC [6]  
ICM: G06F015-00  
EXF 364/DIG.1MSFile; 364/DIG.2MSFile; 395/200; 395/325; 395/550; 395/600;  
395/200.01

L64 ANSWER 7 OF 9 USPATFULL  
AN 95:97816 USPATFULL  
TI Method of downloading information stored in an arching device to  
destination network controller through intermediate network controllers  
in accordance with routing information  
IN Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States  
Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States

Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
PA Johnson Service Company, United States (U.S. corporation)  
PI US 5463735 19951031  
AI US 1994-191284 19940203 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now abandoned  
DT Utility  
LN.CNT 5915  
INCL INCLM: 395/200.100  
INCLS: 395/800.000; 395/200.160; 395/284.000; 370/054.000; 370/060.000;  
364/221.700; 364/239.500; 364/242.960; 364/DIG.001; 364/DIG.002;  
364/949.910; 364/975.100; 364/131.000  
NCL NCLM: 709/222.000  
NCLS: 370/351.000; 700/002.000; 709/237.000; 709/243.000; 710/104.000  
IC [6]  
ICM: G06F013-12  
ICS: G06F013-14  
EXF 395/200; 395/325; 395/800; 370/53; 370/54; 370/60; 370/60.1  
  
L64 ANSWER 8 OF 9 USPATFULL  
AN 95:76754 USPATFULL  
TI Method of accessing configured nodes in a facilities management system with a non-configured device  
IN Woest, Karen L., Wauwatosa, WI, United States  
PA Johnson Service Company, Milwaukee, WI, United States (U.S. corporation)  
PI US 5444851 19950822  
AI US 1994-185674 19940121 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now abandoned  
DT Utility  
LN.CNT 5964  
INCL INCLM: 395/200.100  
INCLS: 364/DIG.001; 364/DIG.002; 364/221.000; 364/222.200; 364/242.940;  
364/247.950; 364/927.920; 364/927.960  
NCL NCLM: 709/222.000  
NCLS: 709/208.000; 709/228.000; 709/242.000  
IC [6]  
ICM: G06F013-00  
EXF 364/DIG.1MSFile; 364/DIG.2MSFile; 395/200; 395/250; 395/275; 395/325;  
395/375; 395/600; 395/650; 395/700; 395/800; 370/94.1; 370/85.1;  
370/85.7; 370/95.1; 370/60; 370/60.1; 379/59; 379/219; 379/220;  
379/221;  
455/33; 340/825.5; 340/825.1; 340/825.52; 340/825.03; 340/825.04;  
340/825.36; 340/825.411  
  
L64 ANSWER 9 OF 9 USPATFULL  
AN 95:8261 USPATFULL  
TI Networked facilities management system with balanced differential analog control outputs  
IN Pascucci, Gregory A., Waukesha, WI, United States  
PA Johnson Service Company, Milwaukee, WI, United States (U.S. corporation)  
PI US 5384697 19950124  
AI US 1993-175770 19931230 (8)  
RLI Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now abandoned  
DT Utility  
LN.CNT 5951  
INCL INCLM: 364/139.000

or more communicating nodes, each communication complying with a predefined communication protocol selected from among protocols available in the network. The contents of packets are detected passively and in real time, communication information associated with multiple protocols is derived from the packet contents.

L56 ANSWER 2 OF 2 USPATFULL

United States Patent

Patent Number: 6041041

Date of Patent: 21 Mar 2000

---

Method and system for managing data service systems

Inventor(s): Ramanathan, Srinivas, 655 S. Faroaks Ave., Sunnyvale, CA, United

States 94086  
Perry, Edward H., 484 Franklin St., Mountain View, CA, United  
States 94041  
Jin, Tai, 1900 Parkwood Dr., San Mateo, CA, United States 94403

Appl. No.: 97-838117

Filed: 15 Apr 1997

Int. Cl. .... H04J003-14

Issue U.S. Cl. .... 370/241.000; 714/025.000

Current U.S. Cl. .... 370/241.000; 714/025.000

Field of Search .... 370/241; 370/242; 370/244; 370/248; 370/250; 370/252;  
370/401; 709/224; 714/25; 714/37; 714/38

Reference Cited

PATENT DOCUMENTS

Patent Number	Date	Class	Inventor
US 4552997	Nov 1985	370/250.000	Daniels et al.
US 5276676	Jan 1994	370/253.000	Horn et al.
US 5677912	Oct 1997	370/218.000	Smith
US 5724510	Mar 1998	370/252.000	Arndt et al.
US 5737517	Apr 1998	714/038.000	Kite et al.
US 5881051	Mar 1999	370/248.000	Arrowood et al.
US 5901141	May 1999	370/248.000	Gruber et al.

Art Unit - 279

Primary Examiner - Jung, Min

Attorney, Agent or Firm - Li, Thomas X.

---

30 Claim(s), 30 Drawing Figure(s), 27 Drawing Page(s)

ABSTRACT

A scheme is described for a data service system having a number of modules. Some of the modules are interdependent. To measure the status of an individual module, the scheme first collects measurements from a number of measurement routes that involve the module. Then the scheme analyzes the interdependencies of the measurements to determine the status of the individual module. The scheme may also determine status of the data service system with a minimal number of measurement routes. This is done by determining (1) all possible measurement routes, (2) determining the dependency between the modules and the measurement routes, and (3) analyzing the dependency to select minimal number of the measurement routes. The scheme can diagnose whether a module is a problematic module or not by analyzing a number of measurements that involve the module. If one of the measurements is good, the module is identified as

L9 ANSWER 2 OF 3 USPATFULL  
United States Patent

Patent Number: 5918017  
Date of Patent: 29 Jun 1999

System and method for providing dynamically alterable computer clusters for message routing

Inventor(s): Attanasio, Clement Richard, Peekskill, NY, United States  
Goldszman, German Sergio, Dobbs Ferry, NY, United States  
Hunt, Guerney Douglas Holloway, Wappingers Falls, NY, United States  
Smith, Stephen Edwin, Mahopac, NY, United States  
Assignee: International Business Machines Corp., Armonk, NY, United States  
(U.S. corporation)  
Appl. No.: 96-701939  
Filed: 23 Aug 1996

Int. Cl. .... G06F003-00  
Issue U.S. Cl. .... 395/200.540; 395/200.690; 395/200.720  
Current U.S. Cl. .... 709/224.000; 709/239.000; 709/242.000  
Field of Search .... 395/200.31; 395/674; 395/675; 395/729; 395/730;  
395/731; 395/200.69; 395/200.72; 395/200.73; 395/182.09;  
395/182.11; 395/200.54; 395/200.51; 370/221; 370/222

Reference Cited

PATENT DOCUMENTS

Patent Number	Date	Class	Inventor
US 4112488	Sep 1978	395/200.690	Smith, III
US 5261096	Nov 1993	395/200.730	Howarth
US 5353412	Oct 1994	395/200.730	Douglas et al.
US 5357632	Oct 1994	395/675.000	Pian et al.
US 5371852	Dec 1994	395/200.540	Attanasio et al.
US 5459864	Oct 1995	395/675.000	Brent et al.
US 5515509	May 1996	395/200.690	Rom
US 5539883	Jul 1996	395/675.000	Allon et al.
US 5675736	Oct 1997	395/200.690	Brady et al.

OTHER PUBLICATIONS

Cisco Internet Solutions, LocalDirector, "More Information About LocalDirector"  
Jun. 18, 1996.

Art Unit - 273  
Primary Examiner - Hindi, Nabil  
Attorney, Agent or Firm - Ludwin, Richard M.; Dougherty, Anne V.; Jordan, Kevin M.

## ABSTRACT

A TCP-connection-router performs encapsulated clustering by dividing each encapsulated cluster into several Virtual EC (VECs), dynamically distributing incoming connections within a VEC based on current server load metrics according to a configurable policy. In one embodiment, the connection router supports dynamic configuration of the cluster, and enables transparent recovery which provides uninterrupted service to the VEC clients.

L9 ANSWER 3 OF 3 USPATFULL

United States Patent

Patent Number: 5287537

Date of Patent: 15 Feb 1994

Distributed processing system having plural computers each using identical retaining information to identify another computer for executing a received command

Inventor(s): Newmark, Rona J., Northboro, MA, United States  
 Alicandro, Rosemarie, Millbury, MA, United States  
 Bixby, Peter C., Northboro, MA, United States  
 Burn, Donald D., Westboro, MA, United States  
 Enberg, Eric H., Westboro, MA, United States  
 Marino, Paul K., Hopkinton, MA, United States  
 Woodbury, Paul W., Hopkinton, MA, United States

Assignee: Data General Corporation, Westboro, MA, United States (U.S. corporation)

Appl. No.: 92-948071

Filed: 21 Sep 1992

## Related U.S. Application Data

Continuation of Ser. No. US 1991-652460, filed on 7 Feb 1991, now abandoned which is a continuation of Ser. No. US 1988-175459, filed on 30 Mar 1988, now abandoned

which is a division of Ser. No. US 1985-798665, filed on 15 Nov 1985, now patented, Pat. No. US 4920483, Pat. No. 4920483

Int. Cl. .... G06F015-76

Issue U.S. Cl. .... 395/800.000; 395/650.000; 395/325.000; 364/DIG.001; 364/281.300; 364/281.800; 364/230.300

Current U.S. Cl. .... 712/029.000

Field of Search .... 395/650; 395/800; 395/325

## Reference Cited

## PATENT DOCUMENTS

Patent Number	Date	Class	Inventor
US 3229260	Jan 1966	395/800.000	Falkoff
US 3614745	Oct 1971	395/800.000	Podvin
US 4412286	Oct 1983	364/200.000	O'Dowd et al.
US 4635189	Jan 1987	364/300.000	Kendall
US 4698629	Oct 1987	340/825.050	Mori et al.
US 4780821	Oct 1988	364/200.000	Crossley
US 4941084	Jul 1990	364/200.000	Terada et al.
US 5014192	May 1991	340/825.050	Mansfield et al.

## OTHER PUBLICATIONS

Art Unit - 237  
Primary Examiner - Lee, Thomas C.

-----

2 Claim(s), 162 Drawing Figure(s), 122 Drawing Page(s)

ABSTRACT

A distributed computer system having a plurality of digital computer systems interconnected by a bus. Each digital computer system runs one or more programs. When it receives a command directed to a system device or a program, it determines whether it can fulfill the command. If not, it determines which one of the other digital computer systems can fulfill the command based upon retaining information stored locally and forwards the command to the other digital computer system.

L43 ANSWER 11 OF 13 USPATFULL  
United States Patent

Patent Number: 5463735  
Date of Patent: 31 Oct 1995

Method of downloading information stored in an arching device to destination network controller through intermediate network controllers in accordance with routing information

Inventor(s): Pascucci, Gregory A., Waukesha, WI, United States  
Rasmussen, David E., Wales, WI, United States  
Decious, Gaylon M., Milwaukee, WI, United States  
Garbe, James R., Greenfield, WI, United States  
Hyzer, Susan M., Brown Deer, WI, United States  
Woest, Karen L., Wauwatosa, WI, United States  
Vairavan, Vairavan, Milwaukee, WI, United States  
Koch, David L., Fox Point, WI, United States  
Gottschalk, Jr., Donald A., Milwaukee, WI, United States  
Burkhardt, Dennis E., Franklin, WI, United States  
Standish, Darrell E., New Berlin, WI, United States  
Madaus, Paul W., Oak Creek, WI, United States  
Spacek, Dan J., Cudahy, WI, United States  
Nesler, Clay G., New Berlin, WI, United States  
Stark, James K., Wauwatosa, WI, United States  
Mageland, Otto M., Greenfield, WI, United States  
Singers, Robert R., Brown Deer, WI, United States  
Wagner, Michael E., Delafield, WI, United States  
Assignee: Johnson Service Company, United States (U.S. corporation)  
Appl. No.: 94-191284  
Filed: 3 Feb 1994

#### Related U.S. Application Data

Division of Ser. No. US 1990-476031, filed on 30 Jan 1990, now abandoned

Int. Cl. .... G06F013-12; G06F013-14  
Issue U.S. Cl. .... 395/200.100; 395/800.000; 395/200.160; 395/284.000;  
370/054.000; 370/060.000; 364/221.700; 364/239.500;  
364/242.960; 364/DIG.001; 364/DIG.002; 364/949.910;  
364/975.100; 364/131.000  
Current U.S. Cl. .... 709/222.000; 370/351.000; 700/002.000; 709/237.000;  
709/243.000; 710/104.000  
Field of Search .... 395/200; 395/325; 395/800; 370/53; 370/54; 370/60;  
370/60.1

#### Reference Cited

#### PATENT DOCUMENTS

Patent Number	Date	Class	Inventor
US 4941084	Jul 1990	364/200.000	Terada et al.
US 5175852	Dec 1992	395/600.000	Johnson et al.

#### OTHER PUBLICATIONS

"The TFTP Protocol (Revision 2)", K. R. Sollins, Jun., 1981 Request for

Comments: 783 pp. 1-18

"Transmission Control Protocol DARPA Internet Program Protocol Specification", Sep. 1981, RFC: 793 pp. 1-85.

"Internet Protocol DARPA Internet Program Protocol Specification", Sep. 1981, RFC: 791 pp. 1-45.

"Window and Acknowledgement Strategy INTCP", David P. Clark, Jul. 1982, RFC: 813 pp. 1-22.

"The TCP Maximum Segment Size and Related Topics", J. Postel, Nov. 1983, Request for Comments: 879 pp. 1-11.

"Bootstrap Protocol (BOOTP)", Sep. 1985 pp. 1-12.

A Multilayered Operating System For Microcomputers, F. Eliassen et al, Microprocessing and Microprogramming 14 (1984) Sep., No. 2, Amsterdam, Netherlands, pp. 45-54.

1988 International Conference On Computer Languages, J. P. Diaz-Gonzalez et al, Oct. 9-13, 1988, Florida, IEEE, "Language Aspects of Envisager: An object-oriented environment for the specification of re-time systems", pp. 214-225.

Conic: An Integrated Approach To Distributed Computer Control Systems, Kramer et al, IEE Proceedings Section A a I, vol. 130, No. 1, Jan. 1983 (Old Working Surrey, GB), pp. 1-10.

Proceedings Of The Seventh Annual Joint Conference Of The IEEE Computer And Communication Societies, IEEE Infocom '88, New Orleans, Louisiana, 27th-31st Mar. 1988, pp. 1050-1059, IEEE New York, U.S.; M. H. Ammar et al.: "Using Hint Tables to Locate Resources in Distributed Systems".

Proceedings Of The 6th International Conference On Distributed Computing Systems, Cambridge, Massachusetts, 19th-23rd May 1986, pp. 515-522, IEEE, New York, U.S.; A. B. Sheltzer et al.: "Name Service Locality and Cache Design in a Distributed Operating System".

Usenix Association Summer Conference Proceedings Atlanta 1986, Atlanta, Georgia, 9th-13th Jun. 1986, pp. 172-181; J. M. Bloom, et al.: "Experiences Implementing BIND, a Distributed Name Server for the DARPA Internet".

Art Unit - 237

Primary Examiner - Lee, Thomas C.

Assistant Examiner - Luu, Le Hien

Attorney, Agent or Firm - Foley & Lardner

-----  
ABSTRACT

A network system having a wide variety of applications and particularly applicable to facilities management systems includes network controllers which continuously process data related to building and industrial, environmental, security and other automated system controls. Each network controller has a network address indicative of a communication link to which the network controller is connected, a local address and a node drop ID to determine whether the network controller is a configured or non-configured device. Data stored in an archive device is downloaded to a destination network controller

in the absence of a routing table in the destination network controller by transmitting a download request message from the archive device to an intermediate network controller with a routing table. The intermediate network controller assumes control of the download request by transmitting the message to the destination controller. The destination controller acknowledges receipt of the message by transmitting an acknowledge message back to the intermediate network controller, which passes the acknowledge message to the archive device in accordance with the routing information stored in the intermediate network controller. Thus, as certain network controllers are connected, disconnected or

disabled during the operation of the network, the control of a process is not interrupted. Additionally, the network controllers are not configured to store large amounts of routing data because a path to a device can be established through other controllers with routing information.

L48 ANSWER 1 OF 37 USPATFULL  
AN 2000:110843 USPATFULL  
TI Method, means and system for communicating on a shared transmission medium  
IN Delumeau, Fran.cedilla.ois, Rennes, France  
PA Canon Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)  
PI US 6108344 20000822  
AI US 1997-787051 19970128 (8)  
PRAI FR 1996-1127 19960131  
DT Utility  
LN.CNT 1791  
INCL INCLM: 370/445.000  
NCL NCLM: 370/445.000  
IC [7]  
ICM: H04L012-413  
EXF 370/254; 370/252; 370/445; 370/447; 370/448; 370/453; 370/461; 370/482; 455/8; 455/9; 455/103; 455/528; 455/500

L48 ANSWER 2 OF 37 USPATFULL  
AN 2000:71702 USPATFULL  
TI System and method for unreported root cause analysis  
IN Bencheck, Michael, Garland, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
Brownmiller, Curtis, Richardson, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
Tran, Minh T., Plano, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
PI US 6072777 20000606  
AI US 1996-668516 19960628 (8)  
DT Utility  
LN.CNT 1161  
INCL INCLM: 370/244.000  
INCLS: 370/465.000; 340/825.060  
NCL NCLM: 370/244.000  
NCLS: 340/825.060; 370/465.000  
IC [7]  
ICM: H04L012-26  
ICS: G05B023-02  
EXF 370/241; 370/242; 370/246; 370/247; 370/248-250; 370/465; 370/466; 370/522; 340/521-523; 340/825.66; 340/825.01; 340/825.06; 364/514B; 371/20.1; 371/20.2; 714/43; 714/47

L48 ANSWER 3 OF 37 USPATFULL  
AN 2000:48378 USPATFULL  
TI System and method for managing network resources using distributed intelligence and state management  
IN Taghadoss, Mehdi, Cary, NC, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
PI US 6052722 20000418  
AI US 1997-813724 19970307 (8)  
DT Utility  
LN.CNT 1201  
INCL INCLM: 709/223.000  
INCLS: 709/224.000  
NCL NCLM: 709/223.000

NCIS: 709/224.000  
IC [7]  
ICM: G06F013-38  
ICS: G06F015-17  
EXF 395/200.53; 395/200.54; 709/223; 709/224; 709/226; 709/202

L48 ANSWER 4 OF 37 USPATFULL  
AN 1999:127810 USPATFULL  
TI System of reporting errors by a hardware element of a distributed computer system  
IN Desnoyers, Christine Marie, Pine Bush, NY, United States  
Garmire, Derrick LeRoy, Kingston, NY, United States  
Herrmann, Antoinette Elaine, Poughkeepsie, NY, United States  
Kampf, Francis Alfred, Fairfax, VT, United States  
Stucke, Robert Frederick, Saugerties, NY, United States  
PA International Business Machines Corporation, Armonk, NY, United States (U.S. corporation)  
PI US 5968189 19991019  
AI US 1997-838389 19970408 (8)  
DT Utility  
LN.CNT 561  
INCL INCLM: 714/047.000  
NCL NCLM: 714/047.000  
IC [6]  
ICM: G06F011-00  
EXF 395/182.02; 395/182.09; 395/185.01; 395/185.1; 395/185.02; 395/200.68;  
395/200.69; 395/200.72

L48 ANSWER 5 OF 37 USPATFULL  
AN 1999:79843 USPATFULL  
TI Method of reporting errors by a hardware element of a distributed computer system  
IN Desnoyers, Christine Marie, Pine Bush, NY, United States  
Garmire, Derrick LeRoy, Kingston, NY, United States  
Herrmann, Antoinette Elaine, Poughkeepsie, NY, United States  
Kampf, Francis Alfred, Fairfax, VT, United States  
Stucke, Robert Frederick, Saugerties, NY, United States  
PA International Business Machines Corporation, Armonk, NY, United States (U.S. corporation)  
PI US 5923840 19990713  
AI US 1997-831255 19970408 (8)  
DT Utility  
LN.CNT 553  
INCL INCLM: 395/185.010  
INCLS: 395/182.020; 395/185.100  
NCL NCLM: 714/048.000  
NCLS: 714/004.000; 714/057.000  
IC [6]  
ICM: G06F011-00  
EXF 395/185.01; 395/182.02; 395/183.14; 395/184.01; 395/183.21; 395/183.19;  
395/185.09; 395/185.1

L48 ANSWER 6 OF 37 USPATFULL  
AN 1999:68055 USPATFULL  
TI Raw performance monitoring correlated problem alert signals  
IN Brownmiller, Curtis, Richardson, TX, United States  
Benchek, Michael, Garland, TX, United States  
Tran, Minh T., Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
PI US 5913036 19990615  
AI US 1996-670847 19960628 (8)

DT Utility  
LN.CNT 932  
INCL INCLM: 395/200.540  
INCLS: 395/200.530; 395/184.010; 395/183.010; 370/244.000; 370/241.000;  
370/248.000; 370/249.000; 370/250.000; 371/020.100; 340/825.060  
NCL NCLM: 709/224.000  
NCLS: 340/825.060; 370/241.000; 370/244.000; 370/248.000; 370/249.000;  
370/250.000; 709/223.000; 714/025.000; 714/047.000; 714/712.000  
IC [6]  
ICM: G06F011-30  
ICS: H04J003-14  
EXF 395/200.54; 395/200.53; 395/184.01; 395/183.15; 370/242; 370/241;  
370/243; 370/246-250; 370/251-253; 370/229-231; 370/236; 370/466;  
370/465; 340/825.06; 340/825.01; 340/825.16; 340/521; 340/522;  
371/20.1;  
371/20.2

L48 ANSWER 7 OF 37 USPATFULL  
AN 1999:13665 USPATFULL  
TI System and method for reported root cause analysis  
IN Brownmiller, Curtis, Richardson, TX, United States  
Bencheck, Michael, Garland, TX, United States  
Tran, Minh T., Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communication Corporation, WA, United States (U.S. corporation)  
PI US 5864662 19990126  
AI US 1996-670844 19960628 (8)  
DT Utility  
LN.CNT 1167  
INCL INCLM: 395/183.190  
INCLS: 395/184.010  
NCL NCLM: 714/043.000  
NCLS: 714/047.000  
IC [6]  
ICM: G06F011-00  
EXF 395/183.01; 395/183.15; 395/183.11; 395/183.17; 395/183.19; 395/741;  
395/742; 364/267; 364/267.7; 379/1; 379/32; 379/33

L48 ANSWER 8 OF 37 USPATFULL  
AN 1999:13611 USPATFULL  
TI System and method for formatting performance data in a  
telecommunications system  
IN Brownmiller, Curtis, Richardson, TX, United States  
Bencheck, Mike, Garland, TX, United States  
Tran, Minh, Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S.  
corporation)  
PI US 5864608 19990126  
AI US 1996-670905 19960626 (8)  
DT Utility  
LN.CNT 711  
INCL INCLM: 379/113.000  
INCLS: 379/133.000; 379/219.000; 379/229.000; 370/248.000; 370/351.000  
NCL NCLM: 379/113.000  
NCLS: 370/248.000; 370/351.000; 379/133.000; 379/219.000; 379/229.000  
IC [6]  
ICM: H04M015-00  
EXF 379/111; 379/112; 379/113; 379/121; 379/133; 379/141; 379/154; 379/191;  
379/196; 379/197; 379/207; 379/230; 379/242; 379/244; 379/335; 379/271;  
379/306; 379/310; 379/219; 379/220; 379/221; 379/222; 379/229; 370/248;

L48 ANSWER 9 OF 37 USPATFULL  
 AN 1998:152041 USPATFULL  
 TI System and method for monitoring network elements organized in data communication channel groups with craft interface ports  
 IN Branton, Jr., Robert A., Farmers Branch, TX, United States  
 DeMoss, John Mark, The Colony, TX, United States  
 PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
 PI US 5845062 19981201  
 AI US 1996-671029 19960625 (8)  
 DT Utility  
 LN.CNT 514  
 INCL INCLM: 395/183.010  
 INCLS: 395/183.190; 395/200.530; 395/200.540  
 NCL NCLM: 714/025.000  
 NCLS: 709/223.000; 709/224.000; 714/043.000  
 IC [6]  
 ICM: G08F011-30  
 EXF 395/183.01; 395/183.19; 395/200.53; 395/200.54; 371/20.1; 370/241-258

L48 ANSWER 10 OF 37 USPATFULL  
 AN 1998:99724 USPATFULL  
 TI System and method for end-to-end threshold setting  
 IN Bencheck, Michael, Garland, TX, United States  
 Branton, Robert, Farmers Branch, TX, United States  
 Brownmiller, Curtis, Richardson, TX, United States  
 DeMoss, Mark, The Colony, TX, United States  
 Landon, Steve, Richardson, TX, United States  
 Tran, Minh T., Plano, TX, United States  
 PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
 PI US 5796723 19980818  
 AI US 1996-670845 19960628 (8)  
 DT Utility  
 LN.CNT 1100  
 INCL INCLM: 370/252.000  
 INCLS: 395/185.010  
 NCL NCLM: 370/252.000  
 NCLS: 714/048.000  
 IC [6]  
 ICM: H04J003-14  
 ICS: H04L012-26  
 EXF 370/229; 370/230; 370/231; 370/235; 370/236; 370/252; 370/253; 370/241;  
 370/242; 370/216; 370/245; 370/244; 395/180; 395/181; 395/183.01;  
 395/184.01; 395/185.01; 395/185.03; 395/185.04; 340/825.06; 340/825.16

L48 ANSWER 11 OF 37 USPATFULL  
 AN 1998:93373 USPATFULL  
 TI Computer system analysis device  
 IN Izuta, Kazuya, Tokyo, Japan  
 Ito, Toshiya, Tokyo, Japan  
 Endo, Yoshio, Tokyo, Japan  
 PA Mitsubishi Denki Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)  
 PI US 5790777 19980804  
 AI US 1995-575225 19951220 (8)  
 PRAI JP 1995-103791 19950427  
 DT Utility  
 LN.CNT 911  
 INCL INCLM: 395/183.210  
 INCLS: 395/183.220  
 NCL NCLM: 714/045.000  
 NCLS: 714/046.000  
 IC [6]

EXF ICM: G06F011-00  
395/183.21; 395/183.22; 395/185.01; 395/185.02; 395/183.01; 395/183.08;  
395/183.09; 395/183.13

L48 ANSWER 12 OF 37 USPATFULL  
AN 1998:89534 USPATFULL  
TI System and method for monitoring point activation  
IN Brownmiller, Curtis, Richardson, TX, United States  
Bencheck, Michael, Garland, TX, United States  
Tran, Minh T., Plano, TX, United States  
Branton, Robert, Farmers Branton, TX, United States  
DeMoss, Mark, Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S.  
corporation)  
PI US 5787074 19980728  
AI US 1996-672356 19960628 (8)  
DT Utility  
LN.CNT 1134  
INCL INCLM: 370/244.000  
INCLS: 370/907.000; 370/248.000; 371/020.100  
NCL NCLM: 370/244.000  
NCLS: 370/248.000; 370/907.000; 714/712.000  
IC [6]  
ICM: H04J003-14  
EXF 370/241; 370/242; 370/243; 370/244; 370/248; 370/907; 370/217; 370/218;  
370/400; 371/20.1; 371/20.2; 395/183.01; 395/183.07; 395/185.01;  
340/825.06; 340/825.16

L48 ANSWER 13 OF 37 USPATFULL  
AN 1998:86694 USPATFULL  
TI System and method for unreported trouble isolation  
IN Bencheck, Michael, Garland, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
Brownmiller, Curtis, Richardson, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
Tran, Minh T., Plano, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S.  
corporation)  
PI US 5784359 19980721  
AI US 1996-672513 19960628 (8)  
DT Utility  
LN.CNT 942  
INCL INCLM: 370/244.000  
INCLS: 370/907.000; 371/020.100  
NCL NCLM: 370/244.000  
NCLS: 370/907.000; 714/712.000  
IC [6]  
ICM: H04J003-14  
EXF 370/241; 370/242; 370/248-250; 370/243; 370/255; 370/246; 370/465;  
370/466; 370/522; 370/247; 371/20.1; 371/20.2; 340/825.01; 340/521;  
340/523; 340/825.16; 340/825.06; 379/207

L48 ANSWER 14 OF 37 USPATFULL  
AN 1998:80370 USPATFULL  
TI System method and computer program product for processing faults in a  
hierarchial network  
IN Brownmiller, Curtis, Richardson, TX, United States  
Bencheck, Michael, Garland, TX, United States  
Tran, Minh T., Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S.

corporation)  
PI US 5778184 1996-707  
AI US 1996-673271 19960628 (8)  
DT Utility  
LN.CNT 988  
INCL INCLM: 395/200.540  
NCL NCLM: 709/224.000  
IC [6]  
ICM: G06F011-30  
EXF 395/200.57; 395/200.54; 395/200.55; 395/200.56; 379/33

L48 ANSWER 15 OF 37 USPATFULL  
AN 1998:76756 USPATFULL  
TI Process and device for identifying faults in a complex system  
IN Beaujard, Jean-Philippe, Toulouse, France  
Fernekes, Andre, Lavernose, France  
PA Aerospatiale Societe Nationale Industrielle, Paris, France (non-U.S.  
corporation)  
PI US 5774645 19980630  
AI US 1995-521060 19950829 (8)  
PRAI FR 1994-10363 19940829  
DT Utility  
LN.CNT 574  
INCL INCLM: 395/183.010  
INCLS: 395/184.010; 395/185.010; 395/182.090  
NCL NCLM: 714/025.000  
NCLS: 714/011.000; 714/047.000; 714/048.000  
IC [6]  
ICM: G06F011-00  
EXF 395/183.13; 395/183.15; 395/183.01; 395/185.02; 395/185.01; 395/184.01;  
395/185.1; 395/182.01; 395/181; 395/182.09; 395/182.16; 395/182.15;  
395/182.18; 395/182.2

L48 ANSWER 16 OF 37 USPATFULL  
AN 1998:70143 USPATFULL  
TI System and method for identifying the technique used for far-end  
performance monitoring of a DS1 at a customer service unit  
IN Brownmiller, Curtis, Richardson, TX, United States  
Benchek, Mike, Garland, TX, United States  
Tran, Minh, Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S.  
corporation)  
PI US 5768261 19980616  
AI US 1996-671028 19960625 (8)  
DT Utility  
LN.CNT 618  
INCL INCLM: 370/252.000  
INCLS: 370/242.000; 370/466.000; 379/029.000  
NCL NCLM: 370/252.000  
NCLS: 370/242.000; 370/466.000; 379/029.000  
IC [6]  
ICM: H04J003-14  
EXF 370/241; 370/249; 370/252; 370/470; 370/526; 370/466; 370/242; 379/5;  
379/34; 379/113; 379/13; 379/22; 379/29

L48 ANSWER 17 OF 37 USPATFULL  
AN 1998:70137 USPATFULL  
TI System and method for monitoring point identification  
IN Brownmiller, Curtis, Richardson, TX, United States  
Benchek, Michael, Garland, TX, United States  
Tran, Minh T., Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States

DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
PI US 5768255 19980616  
AI US 1996-672512 19960628 (8)  
DT Utility  
LN.CNT 1151  
INCL INCLM: 370/248.000  
INCLS: 370/907.000  
NCL NCLM: 370/248.000  
NCLS: 370/907.000  
IC [6]  
ICM: H04J003-14  
EXF 370/254; 370/241; 370/242; 370/248; 370/255; 370/243; 370/246; 370/465;  
370/466; 370/522; 370/244; 370/907; 371/20.1; 371/20.2; 340/825.01;  
340/827; 379/707

L48 ANSWER 18 OF 37 USPATFULL  
AN 1998:53218 USPATFULL  
TI Method and apparatus for replacing a failed channel unit of a sectored base station, in a cellular radio system, with an additional channel unit  
IN Jantti, Arto, Oulu, Finland  
Katisko, Keijo, Oulu, Finland  
PA Nokia Telecommunications Oy, Espoo, Finland (non-U.S. corporation)  
PI US 5752161 19980512  
WO 9508875 19950330  
AI US 1996-619729 19960322 (8)  
WO 1994-FI424 19940922  
19960322 PCT 371 date  
19960322 PCT 102(e) date  
PRAI FI 1993-4198 19930924  
DT Utility  
LN.CNT 261  
INCL INCLM: 455/008.000  
INCLS: 455/009.000; 455/561.000  
NCL NCLM: 455/008.000  
NCLS: 455/009.000; 455/561.000  
IC [6]  
ICM: H04B003-36  
ICS: H04B007-14  
EXF 455/8; 455/9; 455/33.1; 455/53.1; 455/54.1; 455/54.2; 455/56.1;  
455/67.1; 455/103; 455/422; 455/507; 455/517; 455/524; 455/510; 455/78;  
455/62; 455/79; 455/561; 455/562; 455/516

L48 ANSWER 19 OF 37 USPATFULL  
AN 1998:40723 USPATFULL  
TI Method and system for associating related errors in a computer system  
IN Ben-Natan, Or, Bellevue, WA, United States  
Davis, Michael L., Bellevue, WA, United States  
Copeland, Bruce W., Redmond, WA, United States  
PA Microsoft Corporation, Redmond, WA, United States (U.S. corporation)  
PI US 5740354 19980414  
AI US 1995-562823 19951127 (8)  
DT Utility  
LN.CNT 849  
INCL INCLM: 395/183.210  
INCLS: 395/185.100; 364/265.000; 364/267.000; 364/943.900  
NCL NCLM: 714/045.000  
NCLS: 714/057.000  
IC [6]  
ICM: G06F011-00  
EXF 395/183.21; 395/185.01; 395/183.14; 395/183.01; 395/183.22; 395/185.1;  
364/265; 364/948.11; 364/943.9; 364/267; 364/275.5

L48 ANSWER 20 OF 37 USPATFULL  
AN 1998:37794 USPATFULL  
TI Method and system for log management in a coupled data processing system  
IN Geiner, Robert Vaughn, Poughkeepsie, NY, United States  
Nick, Jeffrey Mark, Fishkill, NY, United States  
Phillips, Mark, Campbell, CA, United States  
Warnes, James Henry, Poughkeepsie, NY, United States  
Zimmer, Dennis Jack, Eastleigh, England  
PA International Business Machines Corporation, Armonk, NY, United States (U.S. corporation)  
PI US 5737600 19980407  
AI US 1996-632683 19960415 (8)  
RLI Continuation of Ser. No. US 1994-304677, filed on 12 Sep 1994, now abandoned  
DT Utility  
LN.CNT 3101  
INCL INCLM: 395/616.000  
INCLS: 395/617.000; 395/618.000  
NCL NCLM: 707/200.000  
NCLS: 707/201.000; 707/202.000  
IC [6]  
ICM: G06F017-30  
EXF 395/600; 395/616; 395/618; 395/617

L48 ANSWER 21 OF 37 USPATFULL  
AN 97:124156 USPATFULL  
TI System and method for reported trouble isolation  
IN Brownmiller, Curtis, Richardson, TX, United States  
Benchek, Mike, Garland, TX, United States  
Tran, Minh, Plano, TX, United States  
Branton, Robert, Farmers Branch, TX, United States  
DeMoss, Mark, The Colony, TX, United States  
Landon, Steve, Richardson, TX, United States  
PA MCI Communications Corporation, Washington, DC, United States (U.S. corporation)  
PI US 5704036 19971230  
AI US 1996-672812 19960628 (8)  
DT Utility  
LN.CNT 997  
INCL INCLM: 395/183.190  
INCLS: 370/907.000  
NCL NCLM: 714/043.000  
NCLS: 370/907.000  
IC [6]  
ICM: G06F011-30  
EXF 395/183.18; 395/183.16; 395/183.08; 395/183.01; 395/731; 395/741; 395/742; 395/183.19; 395/200.15; 395/907; 395/914; 395/216; 395/184.01; 371/20.1; 370/244; 370/242

L48 ANSWER 22 OF 37 USPATFULL  
AN 97:89753 USPATFULL  
TI Method and system for identification of software application faults  
IN Batra, Jatinder Pal Singh, Westminster, CO, United States  
PA U S West Technologies, Inc., Boulder, CO, United States (U.S. corporation)  
PI US 5673386 19970930  
AI US 1996-585148 19960111 (8)  
RLI Continuation of Ser. No. US 1994-268132, filed on 29 Jun 1994, now abandoned  
DT Utility  
LN.CNT 638  
INCL INCLM: 395/183.140  
INCLS: 395/185.100; 395/181.000

NCL NCLM: 714/038.000  
NCLS: 714/002.000; 714/057.000  
IC [6]  
ICM: C06F011-00  
EXF 395/183.14; 395/184.01; 395/185.01; 395/185.1; 395/183.01; 395/182.22;  
395/181

L48 ANSWER 23 OF 37 USPATFULL  
AN 97:69223 USPATFULL  
TI Point-to-multipoint performance monitoring and failure isolation system  
IN Opoczynski, Adam, Eden Prairie, MN, United States  
PA ADC Telecommunications, Inc., Bloomington, MN, United States (U.S.  
corporation)  
PI US 5655068 19970805  
AI US 1996-588363 19960117 (8)  
RLI Continuation of Ser. No. US 1993-74913, filed on 10 Jun 1993, now  
patented, Pat. No. US 5519830  
DT Utility  
LN.CNT 744  
INCL INCLM: 395/182.020  
INCLS: 395/184.010; 395/185.050  
NCL NCLM: 714/004.000  
NCLS: 714/047.000; 714/052.000  
IC [6]  
ICM: G06F011-00  
EXF 395/182.02; 395/184.01; 395/185.05; 395/185.01; 371/4; 371/5.1; 371/6;  
371/20.1

L48 ANSWER 24 OF 37 USPATFULL  
AN 97:59914 USPATFULL  
TI Event correlation in telecommunications networks  
IN Whitney, Christopher, Bath, United Kingdom  
PA British Telecommunications public limited company, London, England  
(non-U.S. corporation)  
PI US 5646864 19970708  
WO 9419887 19940901  
AI US 1995-507255 19951116 (8)  
WO 1993-GB2502 19931207  
19951116 PCT 371 date  
19951116 PCT 102(e) date  
PRAI GB 1993-3640 19930223  
DT Utility  
LN.CNT 477  
INCL INCLM: 364/514.000B  
NCL NCLM: 714/047.000  
IC [6]  
ICM: G06F017-00  
EXF 364/514B; 364/514R; 395/182.01; 395/181; 395/185.01; 395/183.02;  
395/183.21; 395/200.11; 340/825.1

L48 ANSWER 25 OF 37 USPATFULL  
AN 97:48240 USPATFULL  
TI Fault processing method and information processing system  
IN Matsushita, Masayuki, Hadano, Japan  
Ugajin, Atsushi, Sagamihara, Japan  
Murase, Shooichi, Kokubunji, Japan  
PA Hitachi, Ltd., Tokyo, Japan (non-U.S. corporation)  
PI US 5636341 19970603  
AI US 1995-476945 19950607 (8)  
PRAI JP 1994-176921 19940728  
DT Utility  
LN.CNT 749  
INCL INCLM: 395/182.110  
INCLS: 395/182.020; 395/182.210; 395/183.010; 340/825.160  
NCL NCLM: 714/013.000

NCLS: 340/825.160; 714/004.000; 714/023.000; 714/025.000  
IC [6]  
ICM: G06F011-30  
ICS: G06F011-22; G06F011-00  
EXF 395/182; 395/181; 395/182.21; 395/183.19; 395/200.13; 395/200.15;  
395/183.01; 395/182.1; 395/182.09; 340/825.16

L48 ANSWER 26 OF 37 USPATFULL  
AN 97:37123 USPATFULL  
TI Mobile telecommunication system having an auxiliary routing arrangement  
IN Lidbrink, Stefan, Haninge, Sweden  
Rosenlund, Henrik, Haninge, Sweden  
PA Televerket, Farsta, Sweden (non-U.S. corporation)  
PI US 5625866 19970429  
AI US 1995-422773 19950414 (8)  
RLI Continuation of Ser. No. US 1994-221458, filed on 1 Apr 1994, now  
abandoned which is a continuation of Ser. No. US 1992-989547, filed on  
11 Dec 1992, now abandoned  
PRAI SE 1991-3681 19911212  
DT Utility  
LN.CNT 416  
INCL INCLM: 455/008.000  
INCLS: 455/033.100; 455/034.100; 455/054.100; 455/067.100  
NCL NCLM: 455/008.000  
NCLS: 455/067.100; 455/445.000  
IC [6]  
ICM: H04B017-00  
ICS: H04Q007-30  
EXF 455/8; 455/9; 455/33.1; 455/34.1; 455/53.1; 455/54.1; 455/56.1;  
455/67.1; 455/68; 455/62; 455/34.2; 370/16; 379/60; 379/63; 379/59

L48 ANSWER 27 OF 37 USPATFULL  
AN 97:30294 USPATFULL  
TI System isolation and fast-fail  
IN Montenegro, Gabriel E., Fremont, CA, United States  
Drach, Steven J., San Francisco, CA, United States  
Wong, Ho Y., Sunnyvale, CA, United States  
PA Sun Microsystems, Inc., Mountain View, CA, United States (U.S.  
corporation)  
PI US 5619645 19970408  
AI US 1995-418830 19950407 (8)  
DT Utility  
LN.CNT 662  
INCL INCLM: 395/185.010  
INCLS: 395/184.010  
NCL NCLM: 714/048.000  
NCLS: 714/047.000  
IC [6]  
ICM: G06F011-00  
EXF 395/182.02; 395/183.19; 395/185.01; 395/800; 395/185.08; 395/184.01;  
395/185.02; 371/20.1; 370/60.1; 370/94.1; 364/242.96

L48 ANSWER 28 OF 37 USPATFULL  
AN 97:16835 USPATFULL  
TI Distributed database management over a network  
IN Nilsen, Kenneth, Chappaqua, NY, United States  
Garcia, David, Danbury, CT, United States  
PA International Business Machines Corporation, Armonk, NY, United States  
(U.S. corporation)  
PI US 5606693 19970225  
AI US 1995-473154 19950607 (8)  
RLI Division of Ser. No. US 1994-259376, filed on 14 Jun 1994 which is a  
continuation of Ser. No. US 1991-770056, filed on 2 Oct 1991, now  
abandoned  
DT Utility

LN.CNT 280  
INCL INCLM: 395/610.00  
INCLS: 395/800.00; 395/200.030; 364/DIG.001; 364/243.700; 364/268.300;  
364/282.400  
NCL NCLM: 707/010.000  
IC [6]  
ICM: G06F011-34  
ICS: G06F017-30  
EXF 395/600; 395/575; 395/800; 395/650; 395/200

L48 ANSWER 29 OF 37 USPATFULL  
AN 97:13384 USPATFULL  
TI Software architecture system having a virtual I/O channel including  
multi-layered communication interface in between virtual stations and  
physical modules  
IN Churchill, Steven J., Danbury, CT, United States  
Daniels, Jr., Edward P., Trumbull, CT, United States  
Kerney, Raymond J., Brookfield, CT, United States  
PA Pitney Bowes Inc., Stamford, CT, United States (U.S. corporation)  
PI US 5603059 19970211  
AI US 1994-232542 19940422 (8)  
DT Utility  
LN.CNT 704  
INCL INCLM: 395/856.000  
INCLS: 395/858.000; 395/376.000; 395/406.000  
NCL NCLM: 710/036.000  
NCLS: 709/100.000; 710/038.000; 712/200.000  
IC [6]  
ICM: G06F013-00  
ICS: G06F013-14  
EXF 395/825; 395/838; 395/849; 395/831; 395/856; 395/858; 395/725; 395/775;  
395/406; 395/418; 370/94.1; 370/110.1

L48 ANSWER 30 OF 37 USPATFULL  
AN 97:4695 USPATFULL  
TI Method and apparatus for handling processing errors in  
telecommunications exchanges  
IN Jonsson, Anders, Stockholm, Sweden  
Winberg, Uffe, Bandhagen, Sweden  
Lignell, Charles G. E., Alvsjo, Sweden  
Lee, Chung M., Uista, Sweden  
Larsen, Peter, Fredriksberg, Sweden  
PA Telefonaktiebolaget L M Ericsson, Stockholm, Sweden (non-U.S.  
corporation)  
PI US 5594861 19970114  
AI US 1995-512275 19950818 (8)  
DT Utility  
LN.CNT 460  
INCL INCLM: 395/181.000  
INCLS: 395/185.010; 379/242.000  
NCL NCLM: 714/002.000  
NCLS: 379/242.000; 714/048.000  
IC [6]  
ICM: G06F011-34  
EXF 395/181; 395/183.14; 395/182.13; 395/182.14; 395/182.15; 395/185.01;  
364/285; 364/265.6; 364/266.5; 379/242

L48 ANSWER 31 OF 37 USPATFULL  
AN 96:66458 USPATFULL  
TI Problem determination method for local area network systems  
IN Winokur, Alex, Haifa, Israel  
Shiloach, Joseph, Kiriak Tiv'on, Israel  
Ribak, Amnon, Misgav, Israel  
Huang, Yuangeng, Travis County, TX, United States  
PA International Business Machine Corporation, Armonk, NY, United States

(U.S. corporation)  
PI US 5539877 19940723  
AI US 1994-266073 19940627 (8)  
DT Utility  
LN.CNT 532  
INCL INCLM: 395/183.020  
INCLS: 395/183.010; 395/185.010  
NCL NCLM: 714/026.000  
NCLS: 714/025.000; 714/048.000  
IC [6]  
ICM: G06F011-34  
EXF 395/575; 395/183.02; 395/183.01; 395/185.01; 371/15.1; 371/30; 371/48;  
364/488; 364/489; 364/490; 364/491; 324/73; 324/158R

L48 ANSWER 32 OF 37 USPATFULL  
AN 96:44474 USPATFULL  
TI Point-to-multipoint performance monitoring and failure isolation system  
IN Opoczynski, Adam, Eden Prairie, MN, United States  
PA ADC Telecommunications, Inc., Minneapolis, MN, United States (U.S.  
corporation)  
PI US 5519830 19960521  
AI US 1993-74913 19930610 (8)  
DT Utility  
LN.CNT 1035  
INCL INCLM: 395/182.020  
INCLS: 395/184.010; 395/185.050  
NCL NCLM: 714/004.000  
NCLS: 714/047.000; 714/052.000  
IC [6]  
ICM: G06F011-00  
EXF 371/20.1; 371/11.2; 371/4; 371/5.1; 371/16.5; 371/6; 395/575; 395/5.2;  
395/6; 395/182.02; 395/184.01; 395/185.05; 395/185.01

L48 ANSWER 33 OF 37 USPATFULL  
AN 96:4426 USPATFULL  
TI Expert based system and method for managing error events in a local  
area  
network  
IN Winokur, Alex, Haifa, Israel  
Shiloach, Joseph, Kirat Tiv'on, Israel  
Ribak, Amnon, Misgav, Israel  
Huang, Yuangene, Austin, TX, United States  
PA International Business Machines Corporation, Armonk, NY, United States  
(U.S. corporation)  
PI US 5483637 19960109  
AI US 1994-266074 19940627 (8)  
DT Utility  
LN.CNT 555  
INCL INCLM: 395/183.020  
INCLS: 395/183.220  
NCL NCLM: 714/026.000  
NCLS: 714/046.000  
IC [6]  
ICM: G06F011-00  
ICS: G06F015-18  
EXF 395/575; 395/550; 395/183.02; 395/183.22; 395/911; 395/917; 364/550;  
364/264.7; 364/269.4; 371/20.1

L48 ANSWER 34 OF 37 USPATFULL  
AN 95:55041 USPATFULL  
TI Method for maintaining a sequence of events function during failover in  
a redundant multiple layer system  
IN Banerjee, Indra, Conshohocken, PA, United States  
McLaughlin, Paul F., Hatfield, PA, United States  
McCracken, Kevin R., Warrington, PA, United States

PA Honeywell Inc. Minneapolis, MN, United States (U.S. corporation)  
PI US 5426774 19620  
AI US 1993-42923 19930406 (8)  
DT Utility  
LN.CNT 639  
INCL INCLM: 395/575.000  
NCL NCLM: 714/016.000  
NCLS: 710/015.000  
IC [6]  
ICM: G06F011-00  
EXF 395/575; 371/7; 371/8.1; 371/16.5; 371/29.1; 371/11.1; 371/11.3

L48 ANSWER 35 OF 37 USPATFULL  
AN 95:6541 USPATFULL  
TI Method and apparatus for locating source of error in high-speed  
synchronous systems  
IN Satterlee, Chris, San Jose, CA, United States  
Penman, Duncan, Sunnyvale, CA, United States  
PA Amdahl Corporation, Sunnyvale, CA, United States (U.S. corporation)  
PI US 5383201 19950117  
AI US 1991-813891 19911223 (7)  
DT Utility  
LN.CNT 1237  
INCL INCLM: 371/029.100  
NCL NCLM: 714/004.000  
NCLS: 714/030.000  
IC [6]  
ICM: G06F011-00  
EXF 371/16.5; 371/29.1; 371/16.1; 395/575

L48 ANSWER 36 OF 37 USPATFULL  
AN 94:91760 USPATFULL  
TI Configurable, recoverable parallel bus  
IN Bartow, Neil G., Saugerties, NY, United States  
Capowski, Robert S., Verbank, NY, United States  
Fasano, Louis T., Poughkeepsie, NY, United States  
Gregg, Thomas A., Highland, NY, United States  
Salyer, Gregory, Woodstock, NY, United States  
Westcott, Douglas W., Rhinebeck, NY, United States  
PA International Business Machines Corporation, Armonk, NY, United States  
(U.S. corporation)  
PI US 5357608 19941018  
AI US 1992-839657 19920220 (7)  
DT Utility  
LN.CNT 1266  
INCL INCLM: 395/200.000  
INCLS: 375/036.000  
NCL NCLM: 709/227.000  
NCLS: 375/257.000; 709/248.000  
IC [5]  
ICM: G06F013-00  
EXF 395/200; 375/36; 375/122; 375/7; 375/121; 385/107; 385/109; 371/11.1;  
371/11.2; 371/20.1; 370/13; 370/13.1; 370/14; 364/200

L48 ANSWER 37 OF 37 USPATFULL  
AN 93:85733 USPATFULL  
TI Failure and performance tracking system  
IN Kleinschmitz, Donald, Melbourne, FL, United States  
PA Storage Technology Corporation, Louisville, CO, United States (U.S.  
corporation)  
PI US 5253184 19931012  
AI US 1991-718491 19910619 (7)  
DT Utility  
LN.CNT 1028  
INCL INCLM: 364/550.000